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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,746	03/20/2006	Horst Lange	GEB-16075	4540
7609                      7590                      10/08/2008 RANKIN, HILL & CLARK LLP 925 EUCLID AVENUE, SUITE 700 CLEVELAND, OH 44115-1405				
			EXAMINER	
			MOORE, MARGARET G	
			ART UNIT	PAPER NUMBER
			1796	
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			10/08/2008                      PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/533,746

**Applicant(s)**

LANGE ET AL.

**Examiner**

Margaret G. Moore

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 to 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 to 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☒ Information Disclosure Statement(s) (PTO/55/08)  
Paper No(s)/Mail Date 5/3/06
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

1. Claims 1 to 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear what is intended by the formula  $-NR^+R_2-$ . It appears from this that the N atom has 5 bonds, but this would be incorrect.

The proviso is confusing. On one hand, the first proviso clause is more narrow than the second proviso and this confuses the intended breadth. Note for instance that the required plurality of  $V^2$  groups will necessarily result in at least two  $Z^2$  groups.

In the definition of  $V^3$ , it is not clear to what the tri or higher valence bonds are bonded. This confuses the breadth of the claim.

In addition, the third proviso clause is confusing on its own. Since some of the tri valent Q radicals are fully bonded, such as  $-NR-$  and the heterocycle shown below it, it is unclear how such units can serve to branch. Thus reference to "the valencies which do not serve for bonding" is confusing because there might not be such valencies. Also it is unclear what is meant by "within a linear main chain without formation of a branch" because the  $V^3$  radicals require the presence of an at least trivalent radical which will form branching. In short, the totality of these proviso clauses simply confuse the breadth and scope of the claims.

In claims 7 and 8, reference to f) and g) lack antecedent basis. Note that these components are found in claim 3.

In claim 10, it is unclear how any amino and/or ammonium groups can be pendant on a polyorganosiloxane main chain when the polysiloxanes  $Z^2$  and  $Z^1$  only have pendant  $R^1$  groups which do not allow for amino or ammonium groups.

2. Claims 17 to 20 provides for the use of a claimed formulation, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 17 to 20 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1 to 20 are rejected under 35 U.S.C. 102(a) as being anticipated by WO 02/10257, as interpreted by the English language equivalent Lange et al.

Lange et al. teach a polyammonium-polysiloxane compound that contains at least one unit of formula (I) as shown in claim 1. See for instance the polysiloxane structure c) as shown on column 3 which contains at least two V<sup>2</sup> groups containing Z<sup>2</sup> structures. Also compare K to Q in claim 1. Note for instance column 4, lines 2 and, which refer to when the K unit represents a trivalent radical. While column 4, lines 35 and on, teach that a preferred embodiment of Lange et al. does not involve trivalent radicals K) to serve as polymer branches, patentees are not limited to their preferred embodiment and the teachings of Lange et al. as a whole anticipate the claimed formula, particularly the claimed provisos (as best as the Examiner can understand them, as noted by the rejection in paragraph 1, supra). Note also column 4, lines 43 and on, which teaches that the main chain of the polymer polysiloxane compounds can bind to the trivalent organic ammonium groups radicals as side chains. See also the trivalent N atoms on the bottom of column 6. In this manner Lange et al. anticipate the claimed compound b).

With regard to the compound a) please see the various formulations taught by Lange et al. for instance on the bottom of column 42. This includes cyclopentasiloxane which meets a) as well as claim 9. While many of the dependent claims further limit

optional components, and thus the prior art need not teach such compounds for anti-cipation, please note that the composition on column 42 includes water as a liquid carrier, non-silicone surfactants and polyquaternium-10, meeting claim 12.

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1 to 20 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 17 and 18 of U.S. Patent No. 7,390,479. Although the conflicting claims are not identical, they are not patentably distinct from each other because '479 teaches branched polysiloxanes that meet the requirement of component b) as claimed. Claims 17 and 18 teach a cosmetic formulation and shampoo that includes such polysiloxanes but does not specifically teach the addition of a nitrogen free polysiloxane. It is very well known in the art and quite conventional for cosmetic and shampoo formulations to include nitrogen free polysiloxanes such as cyclic siloxanes (used as solvents) or dimethicone copolyols (used as surface

active agents), to name a few. In view of claims 17 and 18 in '479, one having ordinary skill in the art would have found the presence of a polysiloxane compound meeting a) in the claimed compositions to have been obvious.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret G. Moore whose telephone number is 571-272-1090. The examiner can normally be reached on Monday and Wednesday to Friday, 10am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Margaret G. Moore/  
Primary Examiner, Art Unit 1796

mgm  
10/2/08